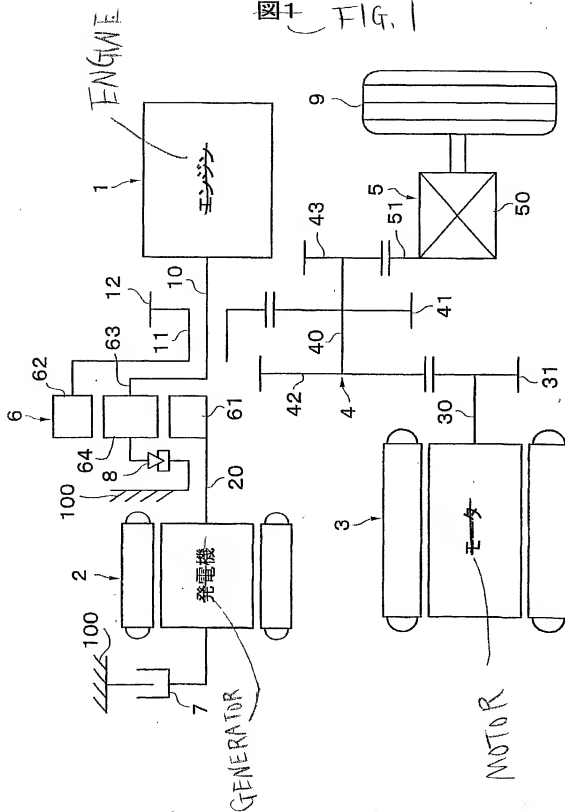


図1 FIG. 1





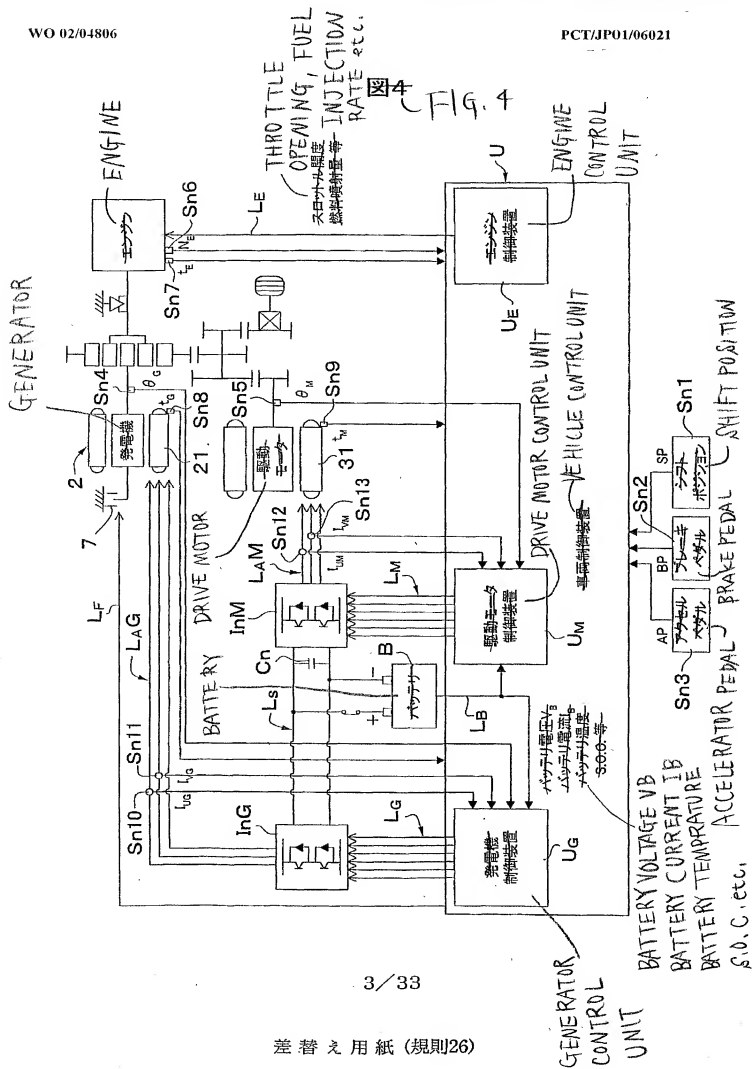


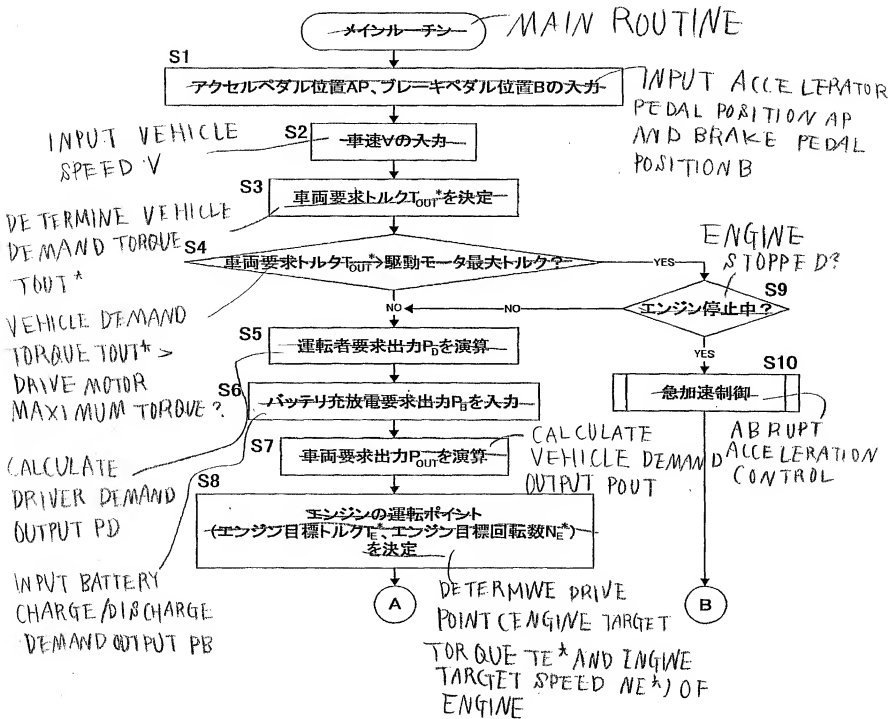
図5  
FIG. 5



図7  
FIG. 7

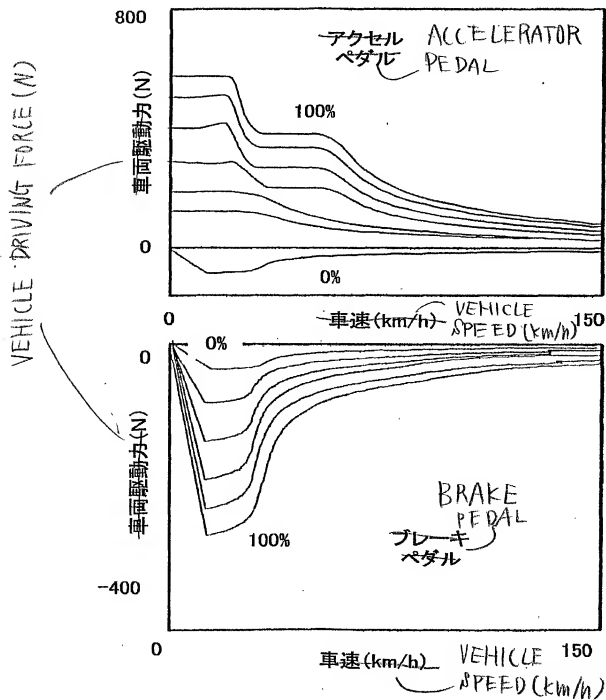


図8 FIG. 8

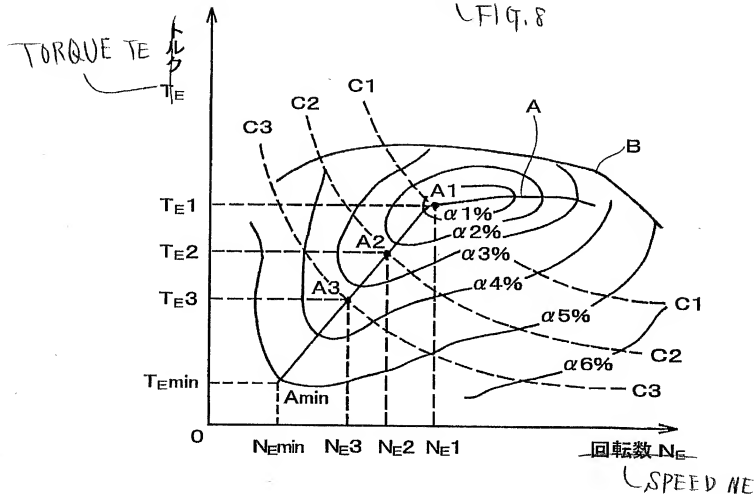
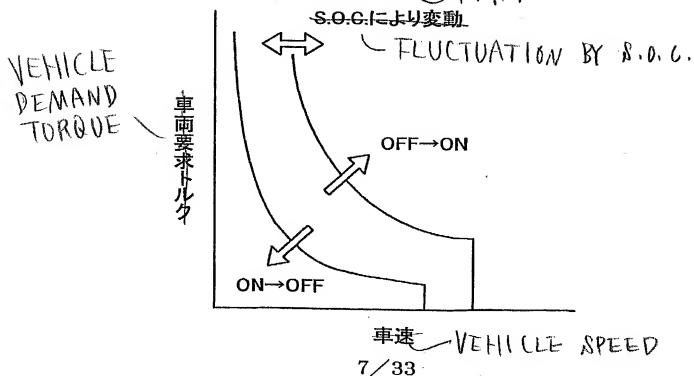


図9 FIG. 9



ABRUPT ACCELERATION  
CONTROL ROUTINE図10  
FIG. 10INPUT VEHICLE DEMAND  
TORQUE  $T_{OUT}^*$ SET MAXIMUM TORQUE  
OF DRIVE MOTOR TO  
DRIVE MOTOR TARGET  
TORQUE  $T_M^*$ SET DIFFERENCE  
TORQUE BETWEEN  
VEHICLE DEMAND  
TORQUE  $T_{OUT}^*$  AND  
DRIVE MOTOR TARGET  
TORQUE (DRIVE MOTOR  
MAXIMUM TORQUE)  
 $T_M^*$  TO GENERATOR  
TARGET TORQUE  $T_G^*$ 

急加速制御ルーチン

S101 車両要求トルク  $T_{OUT}^*$  の入力S102 駆動モータ目標トルク  $T_M^*$  に  
駆動モータの最大トルクを設定S103 車両要求トルク  $T_{OUT}^*$  と駆動モータ目標トルク  
(駆動モータ最大トルク)  $T_M^*$  の差トルクを  
発電機目標トルク  $T_G^*$  に設定

S104 駆動モータ制御

DRIVE MOTOR  
CONTROL

S105 発電機トルク制御

GENERATOR  
TORQUE CONTROL

リターン

RETURN



図11  
FIG. 11

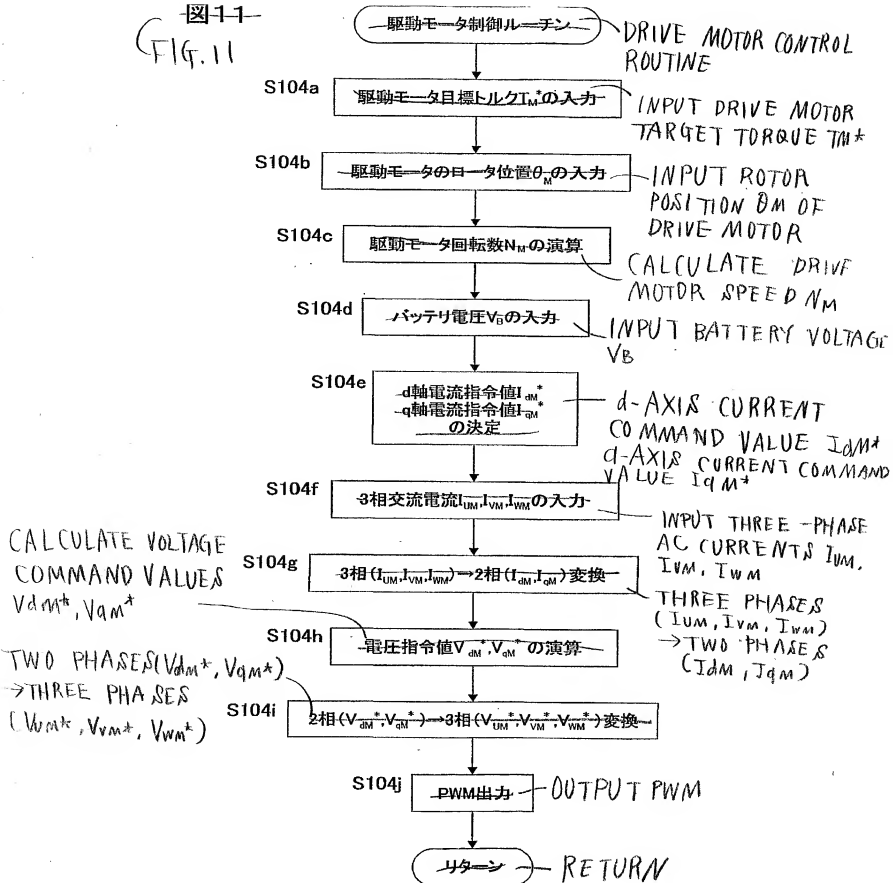


図12  
Fig. 12

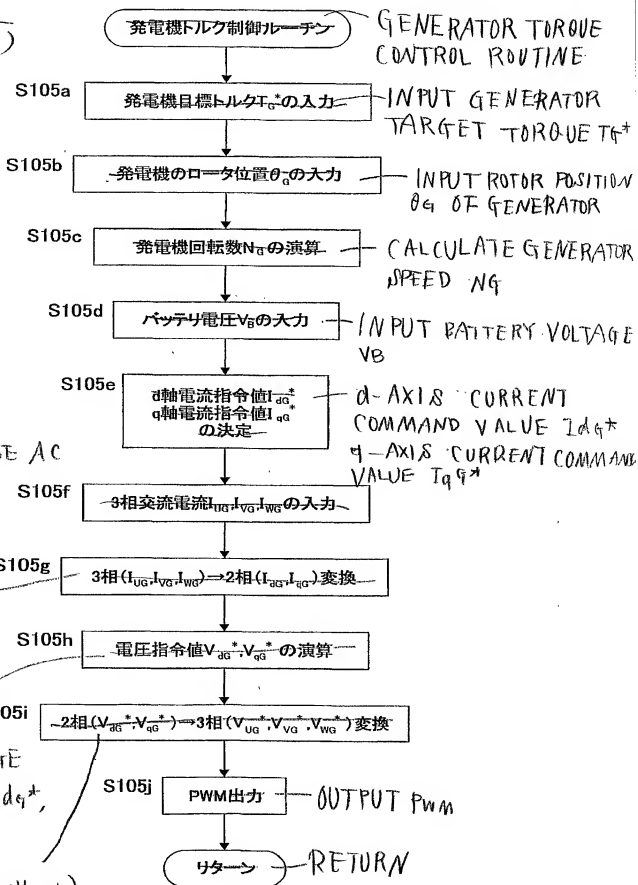
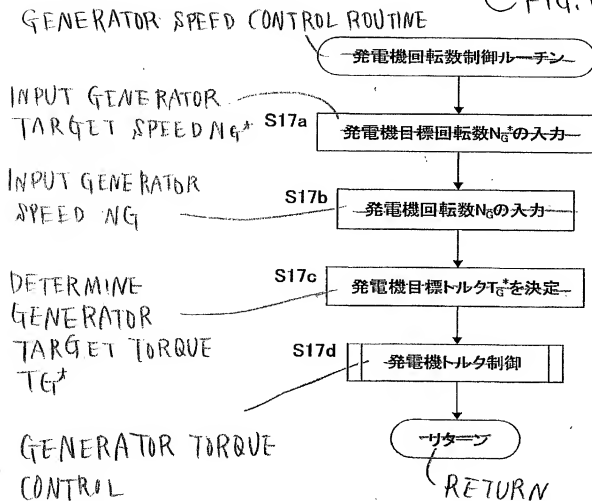
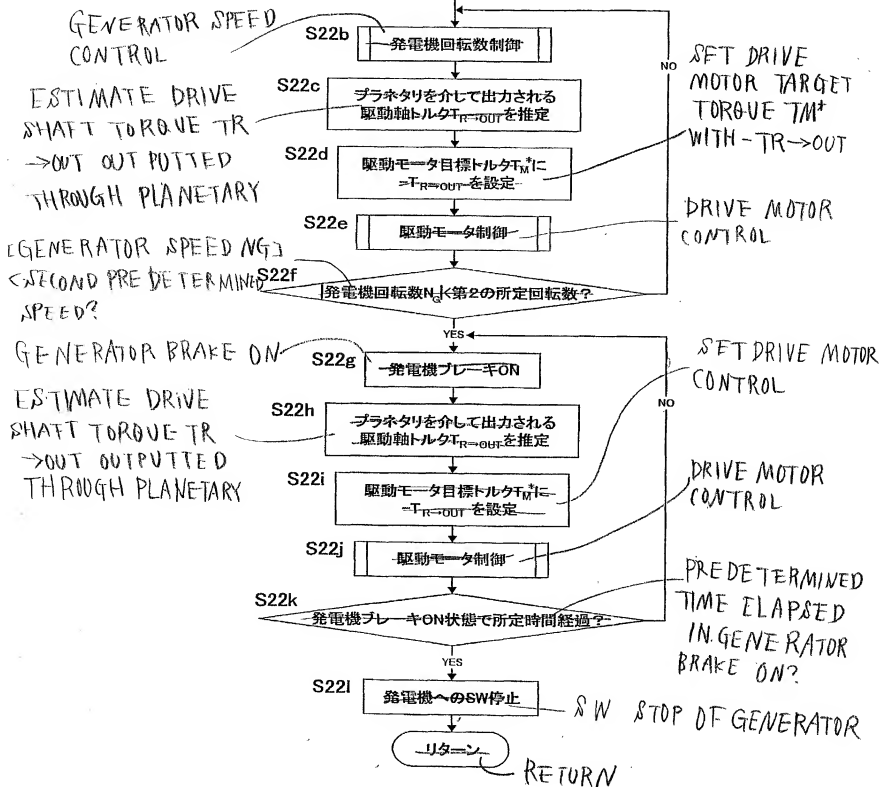


図13 FIG. 13



WO 02/04806

PCT/JP01/06021

GENERATOR BRAKE ON  
CONTROL ROUTINE図 14  
FIG. 14SET GENERATOR  
TARGET SPEED  $N_G^*$   
WITH 0rpm

# GENERATOR BRAKE OFF CONTROL ROUTINE

PCT/JP01/06021

図15

発電機ブレーキOFF制御ルーチン

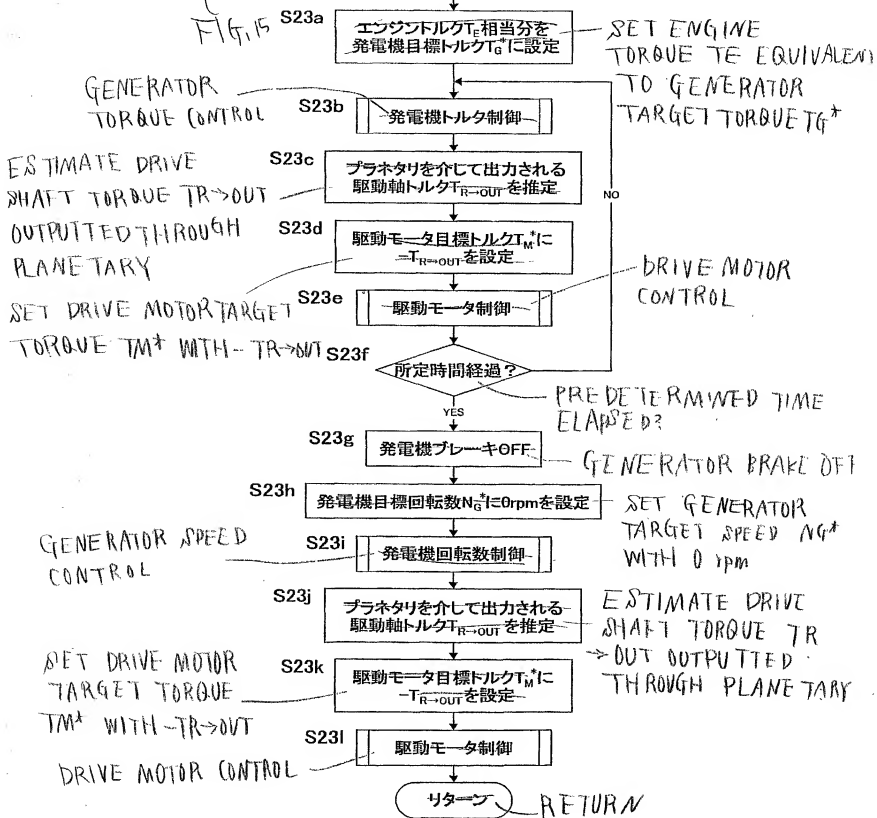
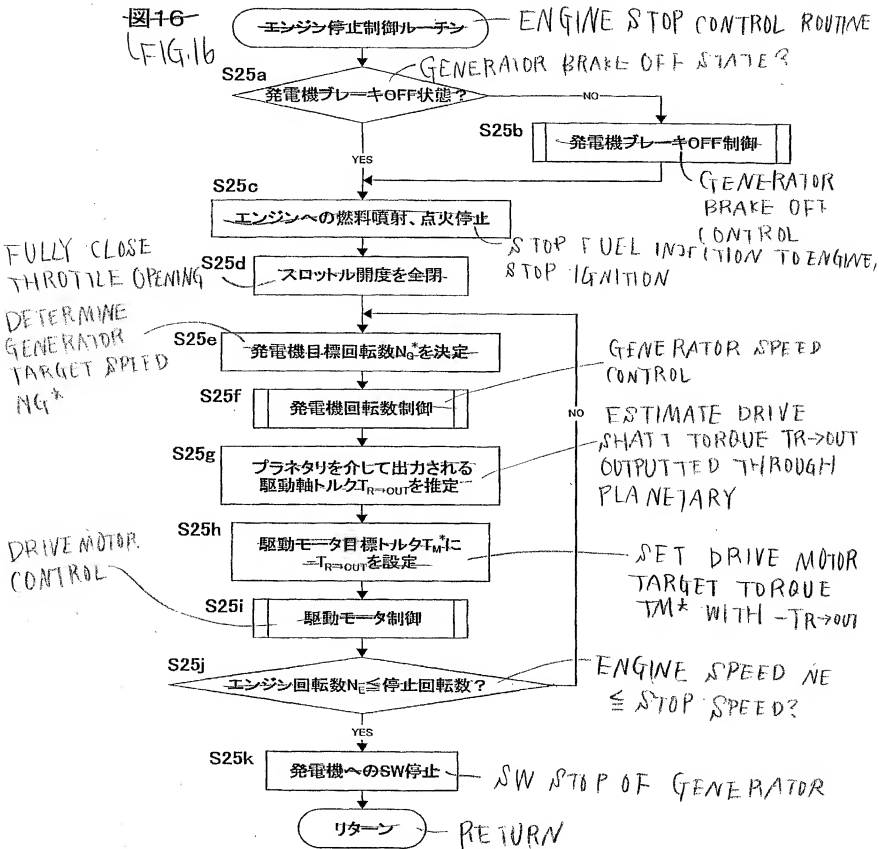


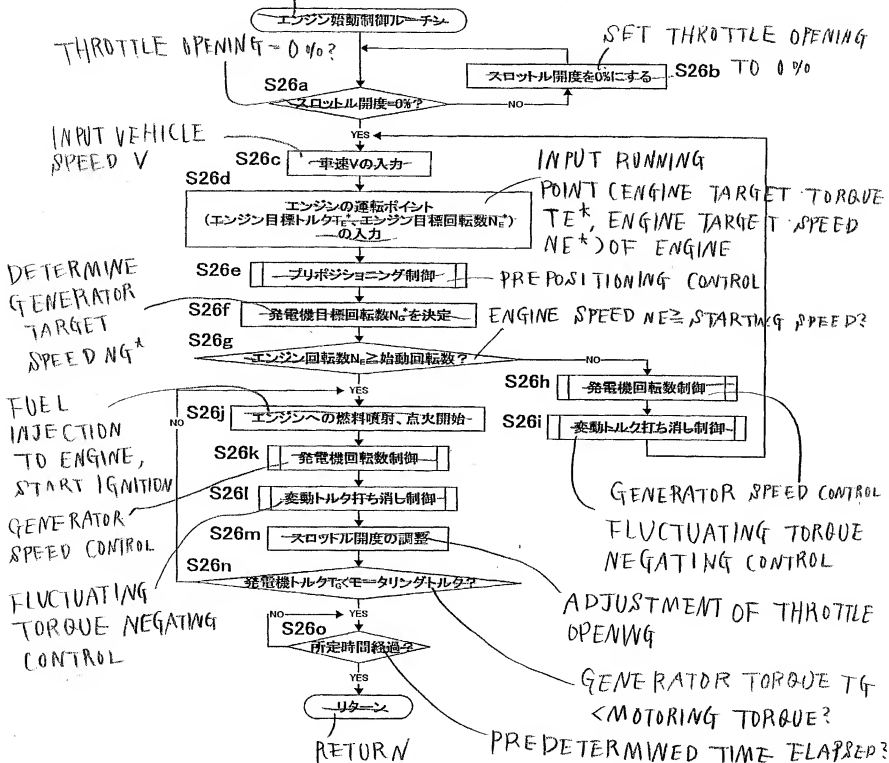
図16  
FIG.16

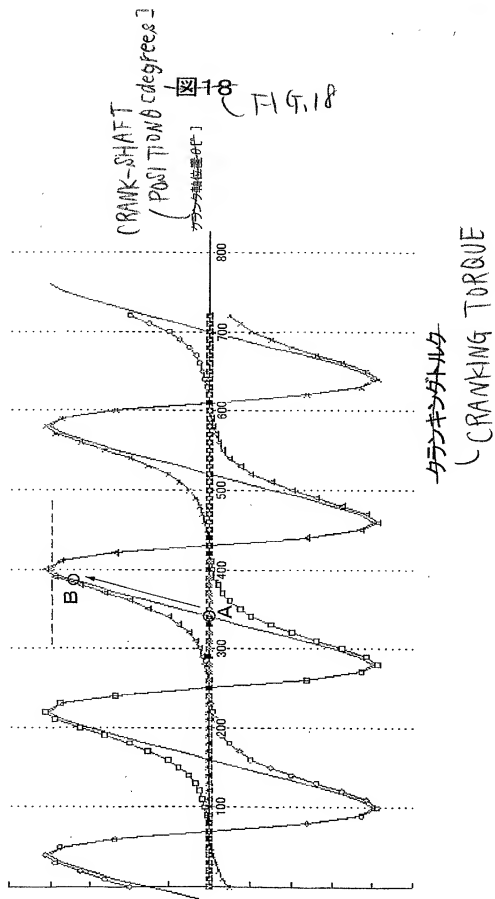


ENGINE START  
CONTROL ROUTINE

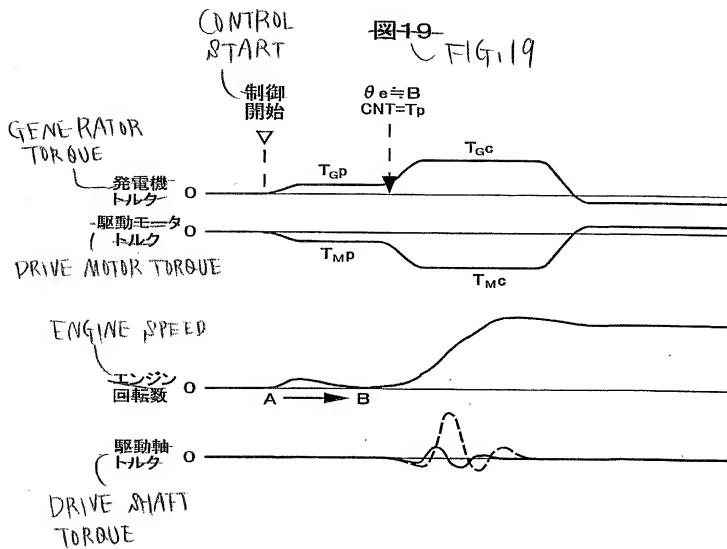
FIG. 17

FIG. 17









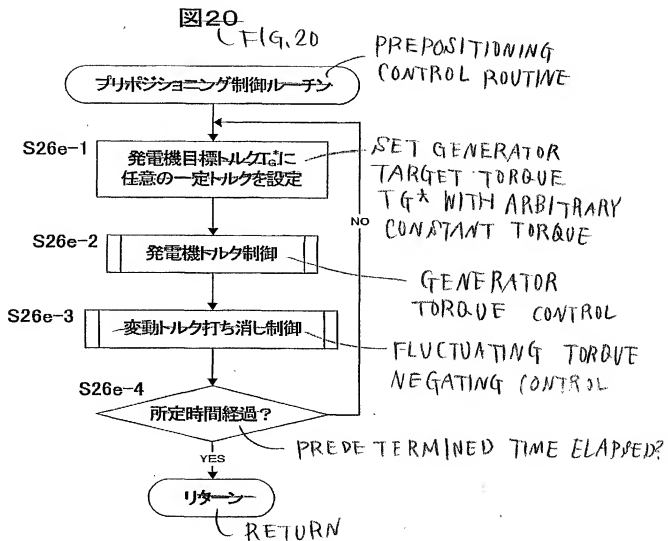


图21 FIG. 21

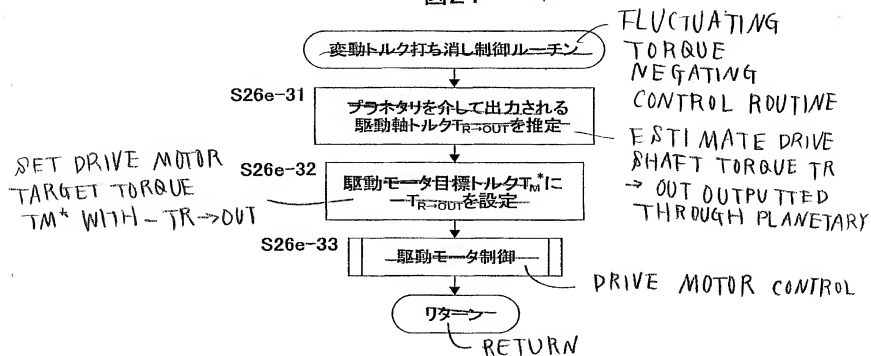


図23

FIG. 23

プリポジショニング制御ルーチン

PREPOSITIONING  
CONTROL ROUTINESET GENERATOR  
TARGET TORQUE  
 $T_G^*$  WITH ARBITRARY  
CONSTANT TORQUE

S26e-1

発電機目標トルク $T_G^*$ に  
任意の一定トルクを設定GENERATOR TORQUE  
CONTROL

S26e-2

発電機トルク制御

FLUCTUATING  
TORQUE NEGATING  
CONTROL

S26e-3

変動トルク打ち消し制御

PREDETERMINED  
CRANK-SHAFT  
POSITION?

S26e-5

所定のクランク軸位置?

YES

リターン

RETURN

NO

図24

FIG. 24



Sn21

図25

FIG. 25



Sn22

図26

FIG. 26

プリポジショニング制御ルーチン

PREPOSITIONING  
CONTROL ROUTINE

S26e-6

クランク軸位置  $\theta$  の入力INPUT CRANK-SHAFT  
POSITION  $\theta$ 

S26e-7

時間  $t$  演算CALCULATE TIME  $t$ 

S26e-1

発電機目標トルク  $T_g^*$  に  
任意の一定トルクを設定SET GENERATOR  
TARGET TORQUE  
 $T_g^*$  WITH ARBITRARY  
CONSTANT TORQUE

S26e-2

発電機トルク制御

S26e-3

変動トルク打ち消し制御

S26e-8

時間  $t$  経過?TIME  $t$  ELAPSED?

YES

リターン

RETURN

GENERATOR  
TORQUE CONTROLFLUCTUATING  
TORQUE NEGATING  
CONTROL

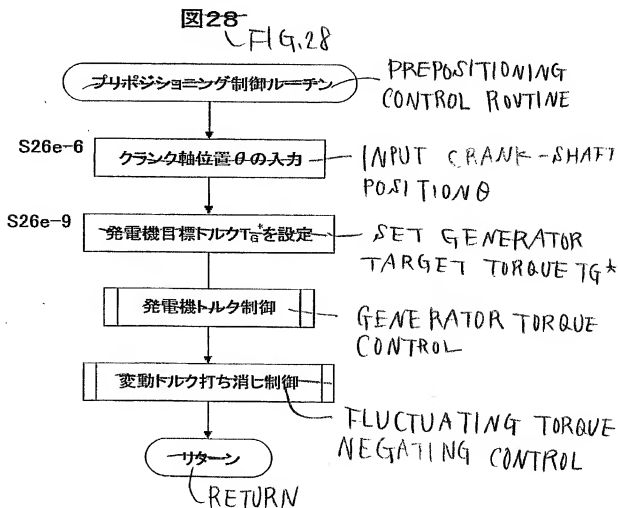
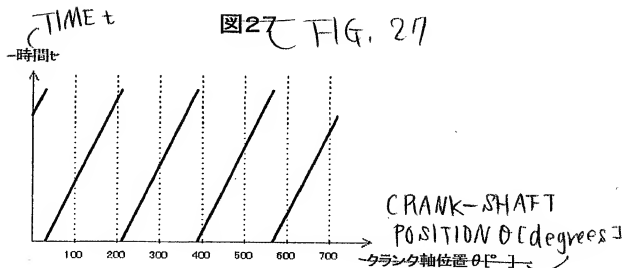
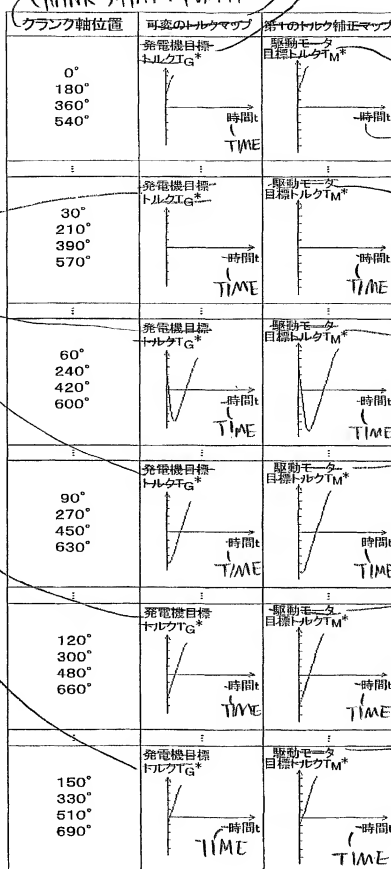


図29

(FIG. 29)

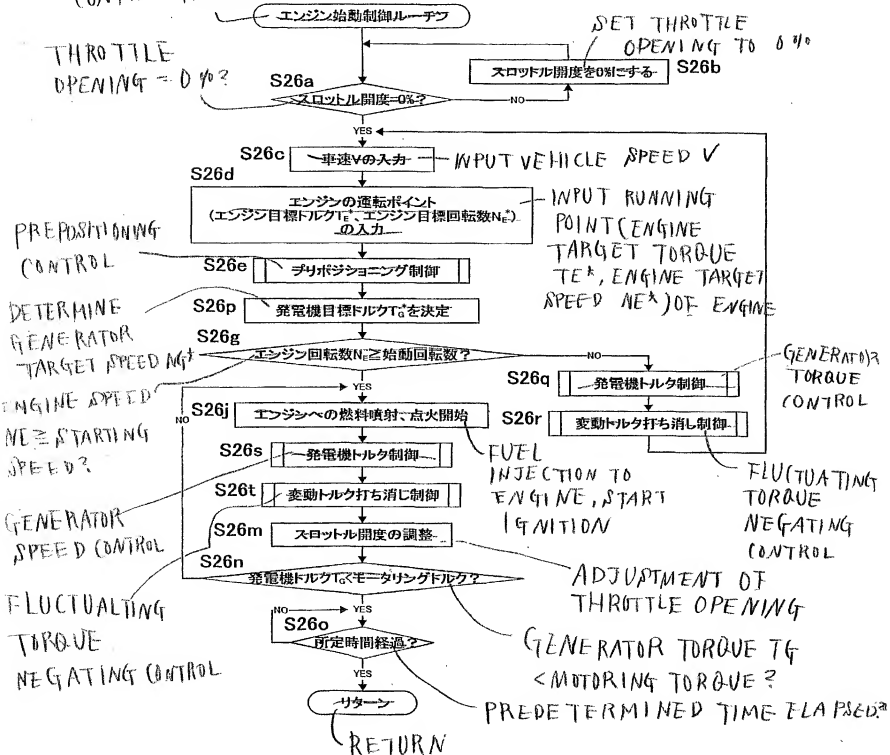
FIRST TORQUE  
CORRECTION MAP  
DRIVE MOTOR  
TARGET TORQUE

TIME

VARIABLE  
TORQUE  
MAPDRIVE MOTOR  
TARGET TORQUE

ENGINE START  
CONTROL ROUTINE

図30—FIG. 30

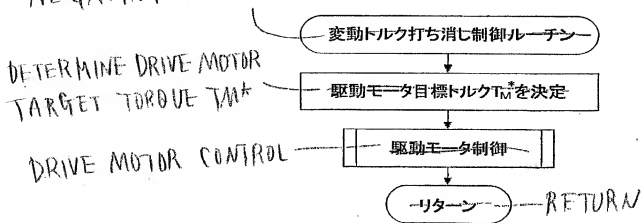




# FLUCTUATING TORQUE NEGATING CONTROL ROUTINE

FIG. 31

図31

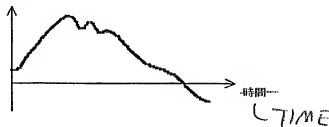


DRIVE MOTOR  
TARGET TORQUE  $T_M^*$

図32

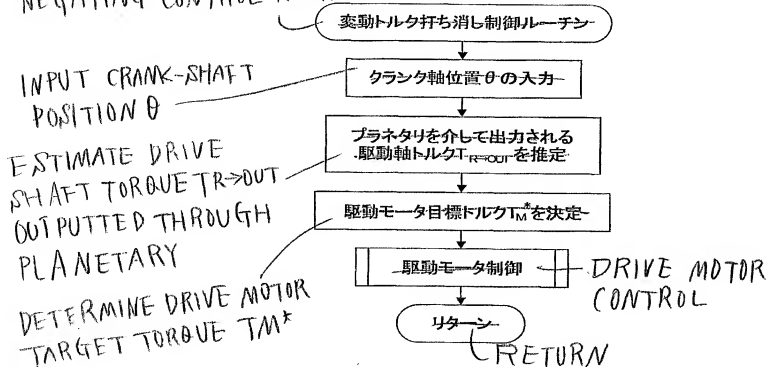
FIG. 32

駆動モータ  
目標トルク  $T_M^*$



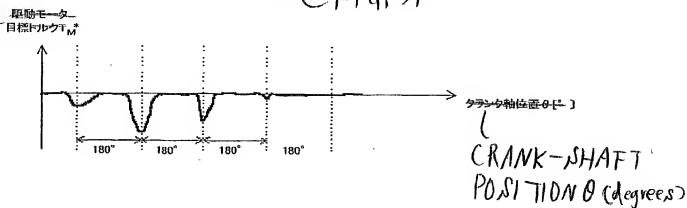
# FLUCTUATING TORQUE NEGATING CONTROL ROUTINE

図33 FIG. 33



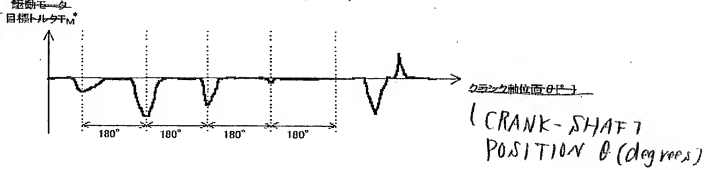
## DRIVE MOTOR TARGET TORQUE $T_M^*$

図34 FIG. 34



DRIVE MOTOR  
TARGET TORQUE  $T_M^*$

図35  
FIG. 35

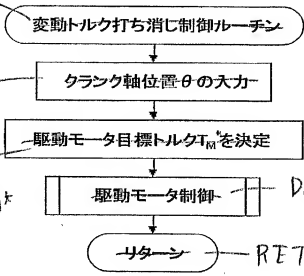


FLUCTUATING  
TORQUE NEGATING  
CONTROL ROUTINE

図36  
FIG. 36

INPUT CRANK-SHAFT  
POSITION  $\theta$

DETERMINE DRIVE  
MOTOR TARGET TORQUE  $T_M^*$



DRIVE MOTOR CONTROL

RETURN

DRIVE MOTOR TARGET TORQUE  $T_M^*$

図37  
FIG. 37

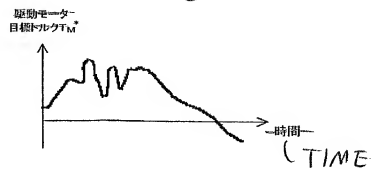
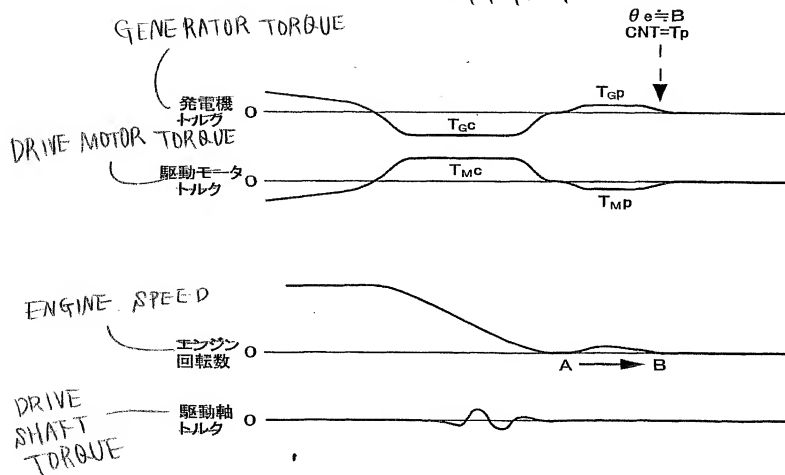
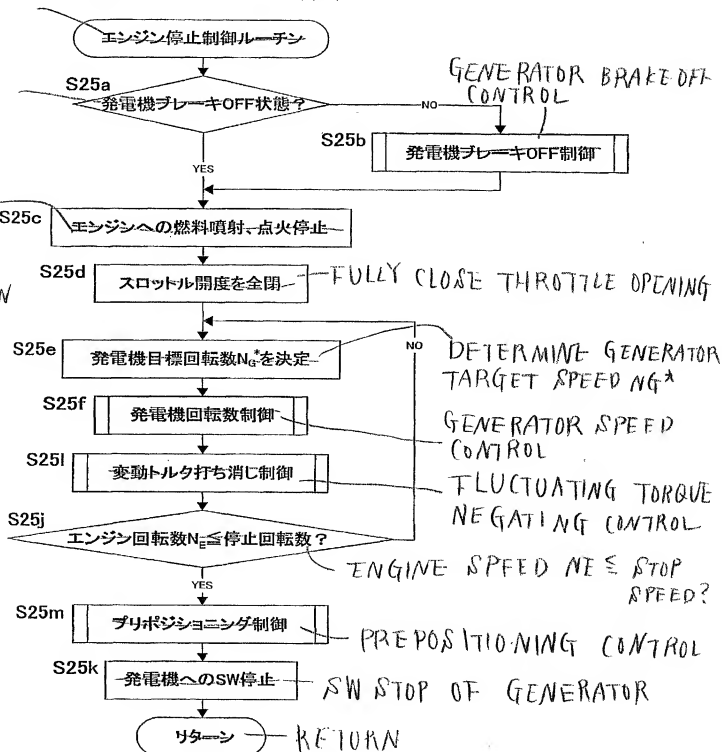




図39

.CFI G.39



ENGINE STOP CONTROL  
ROUTINE図40  
FIG. 40GENERATOR  
BRAKE OFF  
STATE?STOP FUEL  
INJECTION  
TO ENGINE,  
STOP IGNITIONGENERATOR BRAKE OFF  
CONTROL

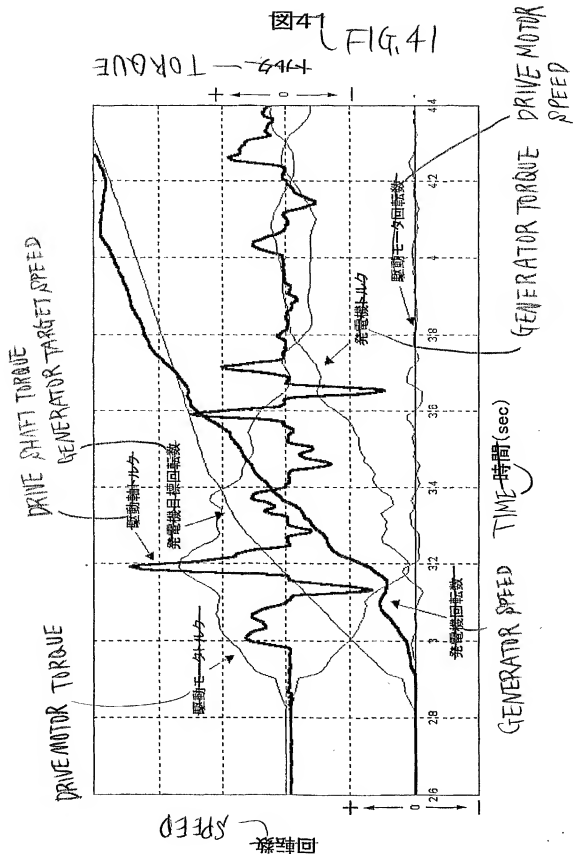






図43 FIG. 43

